WHAT IS CLAIMED IS:

1.- Improvements in an apparatus for obtaining hydrogen by electrolysis, wherein said apparatus consists of a pair of electrodes to which a direct current (DC) is supplied from an outer DC supply or a previously rectified alternating current (AC) supply; with said electrodes being submerged into a saline solution, and a tubing or duct receiving the hydrogen gas newly formed in the electrolysis process; characterized in that the saline solution is sea water and said electrodes are submerged into the sea to a considerable depth; and in that said tubing receiving the hydrogen gas from the bottom of the site where said electrodes are located, maintains at the interior thereof said hydrogen gas to a pressure greater than the atmospheric pressure; and in that said tubing is connected at the top or exit thereof, with a turbine and said turbine is mechanically coupled to a CD electric power generator, and said generator is electrically connected to said electrodes submerged into the sea; and in that said system comprises means to connect and disconnect said electrodes from the outer power supply, and also means to connect and disconnect said electrodes from the electric power generator.

2.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that said system comprises means to lower the amount of power from the outer power supply to said electrodes; said means consisting in a timer to

control the connecting and disconnecting cycles.

3.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that instead a pair of electrodes a plurality of pairs of electrodes is used, and in that said outer power supply instead of being connected to the same electrodes to which said electric power generator is connected, is rather connected to at least a pair of different electrodes; and in that means to connect or disconnect said electrodes from the outer power supply are comprised.

4.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that said electric power generator is an alternating current (AC) generator, an a rectifier system is employed to convert said AC current into direct current (DC) prior to be fed to said electrodes.

5.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that, instead of a turbine, the exit of the tubing containing said hydrogen gas under pressure serves to fill up containers with said gas directly under pressure without a need of an electric power generator coupled to a turbine; and in that the electric power supplied to said electrodes comes from an outer supply.

6.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that said electrodes and said tubing, instead of being located in the sea, are submerged into a salt water body, such as, for instance, a salt lake.

7.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that said electrodes and said tubing, instead of being submerged into the sea, are submerged within a well or natural or man-made cavity, full of salt water.

8.- Improvements in an apparatus for obtaining hydrogen according to Claim 7, further characterized in that said cavity, instead of being full of salt water is full of acidulated or acidified water; whereby further to hydrogen, also oxygen in a gas form is obtained.

9.- Improvements in an apparatus for obtaining hydrogen according to Claim 1, further characterized in that the shape of said tubing is such that a first end is connected to the electrodes, at the sea depth, and said tubing runs upwardly to a determined height relating the first end; with said height being also the sea surface; and then the trajectory of said tubing goes downwardly in such a manner that the second end could reach the same depth as the first end, where said turbine is located.

10.- Improvements in an apparatus for obtaining hydrogen according to any of the preceding Claims, further characterized in that said apparatus can be used in the obtaining of other industrial gases by electrolytic methods, under similar conditions.